

**LOUISIANA TECHNOLOGY INNOVATION FUND  
APPLICATION  
FOR  
MCNEESE STATE UNIVERSITY**

I. **PROJECT TITLE:** *Southwest Louisiana Teaching and Learning E-Center at McNeese State University*

II. **PROJECT LEADERS:**  
Primary - Helen Ware  
Distance Learning Coordinator  
McNeese State University  
4205 Ryan Street  
Burton Business Building, Room 149  
Lake Charles, LA 70605  
Phone (337) 475-5126; Fax (337) 475-5539.

Co-Project Leader - Michael Graham  
Chief Information Technology Officer  
McNeese State University  
4205 Ryan Street  
Burton Business Bldg. Room 433  
Lake Charles, LA 70605  
Phone (337) 475-5524; Fax (337) 475-5012

III. **EXECUTIVE SUMMARY:**  
McNeese State University is requesting **\$966,555.00** in funds to support a Teaching and Learning E-Center designed to enhance reading and math skills in the traditionally underserved populations and to foster innovative teaching using multimedia technologies including distance education media. Key to the successful implementation of this program is an increase in human contact using professional service personnel: A Reading Specialist, Graduate Assistants (tutors), and a System Database Administrator. Finally, re-engineering of the network and the addition of an e-portal will create a unified campus infrastructure and propel McNeese to the forefront of technology in the state.

#### **IV. DESCRIPTION OF THE PROJECT**

##### **A. Project Narrative (2 page limit)**

According to Albert Einstein, “wisdom is not a product of schooling, but the lifelong attempt to acquire it”. Learning can no longer be dichotomized into school and workplace, but must represent an inseparable, collaborative pursuit. McNeese State University has embraced this concept and wants to expand and encourage the increased demand of its service region for lifelong learning. McNeese not only provides a “traditional” college experience for over 8,000 students per year, but also strives to provide experiences for all citizens in our service region. The university is active in offering Continuing Education courses to the community and other programs such as the summer College for Kids program and the Governor’s Program for gifted children. The Distance Learning Department collaborates with the Louisiana Consortium of Insurance and Finance in offering ongoing pre-certification insurance courses. Furthermore, it works with other organizations and businesses such as the Department of Health and Hospitals and Entergy Corporation offering the use of our facilities for video conferences on public issues such as the recent SARS virus and homeland security. McNeese State University believes that increased human contact and technical commitment will build on this tradition by using technology to help address the deficient areas of math, reading, and basic work skills in the underserved population, to better prepare faculty to promote effective technology integration, and to create a cohesive information systems platform that will carry the university into the future.

The goals of this project:

- Increased student achievement in math and reading.
- Basic work skills in the underserved population.
- Online access to tutoring, work skills, and continuing education programs for students and the community.
- Faculty training in multimedia technologies, including distance learning, and appropriate instructional design.
- Increase in the number of online courses to serve the non-traditional populations.
- Creation of an educational e-portal.
- Network re-engineering preparing the university infrastructure for wireless technology.

Specific technology being employed:

- Computer workstations with appropriate tutoring and work skills software for students and under skilled citizens.
- Computer workstations and multimedia technology including software, digital cameras, scanners and digital editing equipment for faculty.
- Switches and network re-engineering components.
- Servers to accommodate new learning center and portal software.

In the fall of 2000, approximately 73 percent of McNeese’s African American students required remedial courses, 70 percent in fall 2001 and 69 percent in fall 2002. Those and other students continue to need skills to improve their overall

achievement. McNeese wants to offer these underserved students an electronic tutoring center giving them the opportunity to hone skills that will enable them to be more academically competitive. Computers, tutoring software with Internet access, as well as coordination with the statewide Smarthinking online tutoring program will allow McNeese State University to reach a far greater number of students and continue tutoring beyond remedial courses.

A Tutoring Coordinator is already being provided by McNeese for the Tutoring Center and will coordinate face-to-face tutoring schedules and work with the Information Technology Department to select appropriate reading and math skills software for the E-Learning Lab. The Coordinator will provide evidence of outcomes by compiling the student data from the tutoring software, pretests, and posttests. An increase in students' basic math and reading abilities and subsequent skills building should translate into improvement in students' overall achievement. The Technology Committee of the Chamber/Southwest Louisiana will participate as a project partner to support and advertise the work skills portion of the program and help in organization of the public involvement. The community will benefit from increased access to advancing basic reading and math work skills, especially through online tutoring in which libraries, community centers, and this new lab may provide Internet access. The public will be encouraged to use the online aspect of the tutoring software after initial contact with face-to-face tutors. Funds from this grant are requested for the professional services of a Reading Specialist to coordinate the instruction and train the tutors in effective reading facilitation.

The Teaching and Learning E-Center will house state of the art computers, software, scanners, digital cameras, and other multimedia technology. Before teachers can be effective in either choosing or in designing e-learning events for their students they must discover new sets of knowledge and skills. The Instructional Technologist provided by McNeese will focus on motivating instructors to use constructivist practices; to facilitate a learning community; to deliver authentic, learner-centered activities; and to suggest alternative means for evaluating learner needs and outcomes as they implement technology into their courses. McNeese expects this to impact courses by making technology an integrated aspect of most courses and giving faculty more incentive to develop web based courses. Furthermore, the center and the specialists will provide ongoing support and training to instructors as they continue to move toward helping higher education students develop critical Internet and technology literacy.

The campus e-learning portal will unite disparate information systems into a common platform accessible through a single log on. This software will allow customization of the desktop according to the individual's role in the university, and allow access to numerous resources. The addition of servers, switches, and other hardware will re-engineer the network not only for the portal and a unified campus system but also secure it for the move to wireless technology in the near future. In order to implement and operate the new system as a true performance tool, the professional services of a Database Administrator will be needed.

**B. Use of Innovative Technology** (1 page, 300 words)

The technology purchased will allow development of a complete Technology and E-Learning Center providing students with tutoring and interactive Computer Assisted Instruction in math and reading in the center and online. Currently McNeese students have no structured online tutoring, and have limited access to tutors in specific subject areas. With specific emphasis placed on improving math and reading skills beyond remedial courses and giving the students the option of additional tutoring in a just-in-time fashion, technology can be used innovatively to increase achievement in a far greater number of students.

The faculty will have the advantage of a small group environment for training in and experimentation with the latest in multimedia technologies; thereby increasing the students' exposure to a great variety of technologies. The faculty will be assisted in pedagogically sound design of technologically enhanced courses and e-learning media, helping them to meet the growing demands of the both the traditional and the non-traditional population. According to Simonson (2000) in *Teaching and Learning at a Distance*, over 40 percent of university students consist of students age 25 and older, so meeting the needs of non-traditional students with full-time jobs or families is a significant goal. McNeese State University's all-encompassing goal is to prepare the entire campus to meet the needs of students facing a world that has become increasingly technologically dependent.

Additionally, the network technology will strengthen the campus infrastructure, but more importantly will take the university into the future, providing a portal with complete access to all educational resources on campus. This will enable McNeese to be the *first* campus within the University of Louisiana System with a portal system. With this infrastructure in place, McNeese will also be poised to progress to the forefront of technology in our state through the establishment of a wireless network within a short period.

**C. Multi-agency Application or Portability to Other Agencies** (1 page, 300 wds)

As McNeese will be the first university within the University of Louisiana System to move to a portal, this project can serve as an example to other universities in the state as a **comprehensive technology system**. As technology becomes a key factor in the world of students as they venture out into the work force, and as programs such as *No Child Left Behind* demand a greater implementation of technology in the K-12 schools, higher education must set the example within the state. This system will create a unified approach to technology with the students, faculty, and staff that can be modeled for other universities in our system as well as businesses within our community.

With the partnership of the Technology Committee of the Chamber Southwest Louisiana, the infrastructure and the training facility can also be an example of the quality of education in our community. McNeese is better preparing faculty, who are better preparing students to be productive citizens in the workforce. Through the resources of the Chamber SWLA in promoting the facility, this partnership will provide a tremendous means of public support and public

relations. The Technology Committee will as well be able to use McNeese's unified infrastructure as a model for business and industry.

Additionally, the Technology Committee can promote the use of the Teaching and Learning Center for Continuing Education programs for surrounding business professionals, providing additional services to the community.

**D. Benchmarking Partners and/or Best Practice References** (if applicable-1 pg, 300 wds)

Part of the proposal exemplifies the current research base that highlights the success associated with faculty training. While there are numerous literature citations on the effectiveness of training, an article in *The Journal, Technological Horizons in Education*, (June 2002), specifically addresses an effective program in which training was offered to faculty members hesitant to use technology. The training helped to make those surveyed more proficient users of new and varied technologies. A variety of institutions within the University of Louisiana System, from Ivy League institutions such as Harvard, and even urban institutions such as Youngstown State University in Ohio have implemented such support programs to enhance the teaching/learning environment on campus. Within each of these institutions, training centers were very successful in helping increase the number of faculty using technology and incorporating new pedagogical techniques into the teaching and learning environment.

Because Youngstown State University and McNeese State University are both urban institutions strongly focused on improving teaching and learning, a comparison can be drawn between the two institutions. As a reflection of Youngstown State's CTLT mission statement, "The Center for Teaching and Learning Technology is here to serve the faculty, staff, and administration of Youngstown State University in utilizing instructional technology," within the first year, the Center had offered over 1400 services to the campus community including scanning, web design, course management software (WebCT) training, and incorporation of video into the classroom. Although there is a great deal of computer and imaging technology as well as assistance available at the center, the emphasis there is: "**High Teach...Not Just High Tech!**" encouraging faculty to collaborate and to learn new techniques to effectively reach students with new electronic tools. For further information see Youngstown State University's CTLT website <http://ctlit.ysu.edu/home.html>

**E. Long-range Planning** (1 pg, 300 wds)

This project supports the long-range goals of the university to create a cohesive technology infrastructure through an e-learning portal that will give the students, faculty, and staff more efficient access to all university resources with a single user name and password. The strategic technology plan and the distance learning master plan include training faculty in multimedia technologies and e-learning media to enable them to meet the growing demands of the both the traditional and the non-traditional population, to compete with other universities around the state and throughout the nation, and to teach students to use technology to access educational resources.

The technology plan for the university includes restructuring the network for both a portal and eventually wireless capability. By re-engineering the network with switches and appropriate security measures, the network will be able to support the portal immediately upon implementation, and will be prepared to step into wireless technology in the near future.

**F. Performance Goal:**

- Increase in skills in reading and math for students.  
*Indicator name:* Skills Assessment  
*Indicator value:* Reading and math software will calculate and measure achievement of skills through pretest and posttest measures. A sample of students will show some improvement in basic skills over the period of use within the three year period.
- Basic work skills in the underserved community.  
*Indicator name:* Work Skills.  
*Indicator value:* Software will track increase in basic math and reading work skills in a sample of public participants over period of use each year.
- Faculty training and instructional design.  
*Indicator name:* Faculty technology use.  
*Indicator value:* Pre-Training survey of a sample of the faculty prior to instruction as to the amount of technology used and the design of their courses. Post-training surveys will compare data on the specific changes from pre survey to post survey. Data will track the number of faculty receiving training and the increase in the use of technology by those faculty members after training.
- Increase in fully online courses.  
*Indicator name:* Online courses.  
*Indicator Value:* Tracking of numbers already collected for Louisiana Board of Regents database, and these numbers will be tracked over the three year period following completion of the grant. Over that period, courses should double the number being taught at the beginning of implementation.
- Portal Implementation.  
*Indictor name:* Portal.  
*Indicator value:* Installation of portal and uniting of disparate systems such as Alpha or Banner, Oracle Database, e-mail, Web for Students, Web for Faculty and community resources into portal.
- Network re-engineering.  
*Indicator name:* Network.  
*Indicator value:* Improvement, redesign, and security of network operations, as well as the increased efficiency of the network. Network administrator can provide a topographical map of the changes in the network.

## G. Technical Approach (3 pages)

### 1. Technical description.

#### **Network expansion:**

McNeese has already begun the addition of switches to replace outdated hubs which will support additional bandwidth also being added to system. *Network monitor, firewall blades, and batteries* are needed for the security of network when the portal is added, and to re-engineer the network to receive wireless technology when appropriate.

#### **Teaching and Learning E-Center:**

*Student Tutoring Lab:* Classroom computer lab coordinated by existing Tutoring Coordinator and the additional *Reading Specialist. Server* will be used to load tutoring math and reading software so that it will be accessible via the lab or the Internet. Math and reading software will be used to increase student achievement in basic math and reading scores. This may be used in conjunction or in addition to remedial courses. This will also be available to the public for work skills tutoring or continuing education training at specified times.

*Faculty Training Lab:* Small computer lab with additional high end computers for video editing and other multimedia applications. Scanners, digital cameras, printers, CD/DVD burners and other multimedia equipment and software applications will be used for innovative classroom use.

*Presentation systems:* Computer, monitors, and projector to allow presentation to the classroom for instructional or training purposes.

#### **Portal**

Server and SCT Luminis Foundation software to support an e-portal that will tie together all of the resources such as Blackboard, Alpha, Web for students and Web for Faculty as well as a customizable desktop based on each individual's role in the university (student, public, faculty, staff, and administration). The portal will streamline access and technical support by allowing users to login once and be able to access all resources that currently require separate logins and separate system administrators.

### 2. Interoperability

The portal is a crucial tool designed to facilitate interoperability. The portal will be an extensive system consisting of a server and software that will tie together all of the existing e-resources on campus. The portal is relying on the network enhancements that are not only necessary for that technology but will also be interoperable with wireless technology when the campus moves forward with that capability. The portal has become an evolving part of the education arena designed to move campuses into a technological community.

The tutoring center, like the portal is designed to enhance the human and technical interoperability which will allow students to move forward in achievement and to reach the underserved population. The center will be able to cooperate with remedial courses or provide additional tutoring and skills building for students as they move along in their degree programs. The program will also be able to complement the online Smarthinking tutoring program which is designed for short periods of tutoring per individual.

The faculty training center is essential in order to create a technology enhanced campus and to improve the technological abilities of McNeese State University's faculty, staff, and students. Without faculty training, instructors are left to stumble around in the dark, trying to learn new technologies on their own as well as how to incorporate them into the classroom. Students suffer as they move out into a technology dependent world, not sufficiently exposed and versed in current technology tools. As the campus itself moves to a more technology-centered structure with the addition of the portal, the training center will operate to train administrators, staff, and instructors in the more efficient use of those tools.

### 3. Scalability

The addition of switches and security upgrades to the network will allow growth in its services by making it ready for additional bandwidth, new users, and the security and application of wireless technology in the near future. The portal provides endless opportunities and the ease with which to add new electronic resources as they become available, or as changes are made to individual systems or software.

The Teaching and Learning E-Center will accommodate additional users and the online aspect of the tutoring center will allow increasing numbers of students to be added as participation becomes greater. The faculty Teaching Lab will be designed to keep up the latest and most current technologies, and university resources will be dedicated to upgrades. The lab is essential to the operation of a complete technological system to train existing personnel and to continue training new faculty and staff.

### 4. Maintaining the System

Part of the cost of the portal system is being requested from the Technological Advancements for Students Committee (TASC), as the portal will provide significant resources to the students. Future upgrades to the portal can be requested through TASC, or through the Information Technology budget. Additionally, the university has several other funds that can be accessed for important upgrades.

Upgrades to the Teaching lab will be maintained so that the teaching center will always have the most up-to-date technology available to train faculty.

The Information Technology Department has sufficient technical support personnel in place dedicated to the expansion of and appropriate use of

technology on the campus. They will continue to maintain the campus infrastructure, and to sustain the network, the portal, and the teaching and learning labs. To ensure the maintenance of the labs, the portal, and the new server, the professional services provided through these funds will be budgeted as new personnel once the implementation of this project has been successfully completed.

#### **H. Implementation Approach** (Time Line-1 page 300 wds)

With the new system online, McNeese State University will find increased efficiency in technology utilization by its faculty and students. This increased usage will create more technically competent citizens and will strengthen the base knowledge of our students, placing numerous resources at their fingertips. The first two years will focus on creating the necessary infrastructure and the remaining three will focus on continuous improvement in the training process and evaluation of the program.

##### **5 year plan**

**Year 1** Purchase equipment to assemble e-center facilities, install components to improve network infrastructure, and begin portal installation. Conduct surveys to collect data of technology usage by faculty and extent of the portal implementation

**Year 2** Continue equipment implementation, begin training and tutoring, and fully deploy portal implementation.

**Year 3** Continue training for faculty and student tutoring. Design and conduct first post-implementation data survey.

**Year 4** Continue above training and additional data surveys.

**Year 5** Continue training, data survey

Because most of the equipment being requested, (network, portal, and e-center) is designed to be a long term investment, any upgrades will be covered by the university. Although none are anticipated in the time span following the grant, unallocated university resources such as the Technological Advancement for Students Committee (TASC) or gaming revenue can be used for upgrades and maintenance.

The professional services being requested are designed to get the systems implemented and organized. As the success of the program begins to foster increased and improved technological usage on campus, the university will look at moving these contracted positions into the overall budget of the university. McNeese State University will also continue to explore other avenues to support this endeavor. A wide variety of federal and state grants are available to help continue to support this project.

**J. Integration with Existing Technologies (1 pg. 300 wds)**

The network core switches have been integrated in the previous year, and have provided gigabit Ethernet connectivity for the campus. Currently, McNeese State University is in the process of removing all of the hubs on campus replacing them with Cisco network switches. This new network will provide the foundation for all the technological enhancements which would be provided by the grant. The other hardware will add new security measures to support fee payment capabilities within the portal, as well as making the system secure for wireless. This year, McNeese began the implementation of Banner, replacing the campus business system and providing an essential component for the portal. The portal will work as a cohesive unit to tie together all of the current technologies that are pieced together campus-wide such as Blackboard, Web for Faculty, Web for Students, McNeese Alpha, Web Mail, and Frazier Memorial Library databases. The portal will make all of these existing technologies accessible through one login. Multiple system administrators will no longer be required to assist with individual access or lost passwords due to the current multiplicity of login sites for each user.

The Teaching and Learning E-Center will build upon the face-to-face tutoring center, enhancing its capability. The existing Tutoring Coordinator will have the support of a Reading Specialist to specifically coordinate the reading plan. Students will have access to the tutoring online anytime, anyplace. The Faculty Training Center will build on the university's commitment to expand and incorporate technology throughout. Many classrooms have been equipped with computers, presentation systems, and other technology but many of the faculty still lack the skills necessary to implement that technology in their instruction. By training the faculty in instructional design and current multimedia technology implementation, integration with these specific technologies and the university commitment will move forward as planned.

## K. Project Budget and Costs

### 1. EQUIPMENT

#### **E-Center Multimedia**

Digital Still Cameras- Four (4) will be needed for digital video training for classroom implementation. **Cost: \$3296.00**

Digital Video Cameras-Four (4) will be needed for digital video editing and training for classroom implementation. **Cost: \$15,942.00.**

Tripods: Four (4) Titan 3000 or equivalent models are needed for use with the digital cameras. **Cost: \$580.00**

Lighting Kit: Two (2) lighting kits are requested to work with digital video preparation. **Cost: \$905.00**

DV Decks-Two (2) Sony DSR25 or equivalent Digital Video decks are needed for digital video projects. **Cost: \$6600.00**

Miscellaneous equipment (bags, microphones, etc). **Cost: \$4500.00**

Scanners-Two (2) HP CoolScan, (1) Scanjet will be used to scan images into classroom materials. **Cost: \$2200.00**

Printers-HP 5100dtn, HP 5500dtn, HP Photojet 7550 models are being requested for project printing and classroom handouts. **Cost: \$11, 299.00**

CD/DVD Burner: Hamilton Model: To burn presentations, digital video and materials for classroom implementation. **Cost: \$1,195.00**

#### **E-Center Computers**

Servers-Three (3) of the following units will be needed for system components (Web for Faculty, Web Publication, Enhanced Blackboard) of the technology infrastructure working within the portal, and the Teaching and Learning E-Center. The Base unit is an Intel Xeon Processor at 1.9GHz, 1MB Cache, Redundant Power with an additional Dual Intel Xeon Processor at 1.9GHz, 1MB cache, (4) 36GB 10K RPM ultra 320 SCSI Drives, Red Hat Linux 2.1 Advanced Server with 3 year Red Hat Network subscription Operating System, network adapter, remote management modem, CD-RW/DVD drive for servers. Total cost for the **3 units: \$54,200.00**

Tutoring computers: Thirty (30) desktop computers will be installed in the tutoring center for student and public access to tutoring software and Internet resources. Each computer will be equipped with the following or equivalent: an integrated NIC card, CD-RW/DVD, Zip, and 3.5 inch floppy drives. Microsoft office software and virus protection software will be installed in the computers after they are on campus, utilizing site licenses. **Cost per computer: \$1,393.00.**

Faculty computers: Four (4) high end desktop computers will be installed in the faculty technology re-engineering center for faculty training and use. These computers will provide sufficient memory for graphic design and high end 3-D graphics. Each desktop will be equipped with a minimum: 20 inch Flat panel monitor, 120 GB hard drive, an integrated NIC card, CG-RW/DVD, Zip, and 3.5 inch floppy drive, Graphics Card NVIDIA, QuadroFX 100, 128 MB, dual monitor DVI or VGA capability or equivalent computer. Microsoft Office software and virus protection software will be installed in the computers after they are on campus, utilizing existing site licenses. Various multimedia software applications purchased through this grant will also be installed on these computers. **Cost per computer: \$5,370.00.**

Faculty Macintosh computers: Three (3) high end Macintosh desktop computers will be installed in the faculty technology re-engineering center for faculty training and use of multimedia and authoring technologies requiring faster and better equipped machines. Macintosh computers are provided for the faculty who still use these machines within their departments, especially Mass Communications and Visual Arts. The Macintosh computers will be equipped with minimum 2GB SDRAM, 120 GB Ultra ATA drive, DVD/CD-RW, ATI Radeon 9700 Pro graphics card, and 23" flat panel display. **Cost per unit: \$6,007.00.**

High end faculty PC computer: One (1) high end desktop computer will be installed in the faculty technology re-engineering center for faculty training, use of multimedia and digital video editing technologies, and DVD authoring capabilities requiring a faster and better equipped machine. Desktop computer will be equipped with two 120 GB hard drives, two 20 inch UltraSharp flat panel monitors, 3Dlabs Wildcat IV 7110 256 MB Dual VGA/DVI graphics card, 3.5 inch floppy drive, 4X DVD-RW-R Drive with Roxio Easy CD Creator, Sound Blaster Audigy II sound card with 1394. Specifically, AVID Digital Video Editing software will be loaded on this editing station. **Cost: \$7,079.00.**

Faculty PC notebook: One (1) PC laptop will be provided for faculty training in a portable laptop. **Cost: \$3, 872.00.**

Faculty Macintosh notebook: One (1) Macintosh laptop will be provided for faculty training in a portable laptop. **Cost: \$3877.00.**

Workstation centers: Computers will need to be set up on workstation tables to accommodate wiring and network cables. **Cost: \$8,000.00**

**Portal Servers and storage:** One of each of the following configuration will provide the necessary hardware for the portal system: **Cost: \$27,990.00 total configuration.**

Sun Fire V480 Server 2 @ 900 MHz Cu, 4 GB memory, 2-36 GB, 1.0", 10,000 RPM, FC-AL disks, DVD, 2 power supplies, standard configuration. **Cost \$22, 995.00**

Localized Power Cord Kit North American/Asian Cost: N/C

PGX32 8&24 Color Frame Buffer with software on CD and video adapter cable.  
**Cost: \$95.00**

Sun StorEdge 2 Gb PCI dual fibre channel network adapter, 200MB/s per channel with optical interface. **Cost: \$4,900.00**

**Network Hardware:** The following components are necessary to upgrade the network to facilitate the operation of the portal, and to secure and enable future wireless capability.

Firewall Blade-Virtual Firewall for campus to safeguard network against accessibility to unwanted Internet sites. **Cost: \$27,000.**

CISCO Firewall Blade for Catalyst 6500: Cost: \$19,950.00

CISCO Firewall Module Software for Catalyst 6500: Cost \$0.00

CISCO 8x5xnbnd Svc, Firewall Blade for Catalyst 6500. Cost: \$2,350.00

Integration: Staging, testing and installation of Firewall and Sup Engines  
Cost: \$4700.00

Network Monitor: Symantec NetRecon is a network vulnerability assessment tool that discovers, analyzes, and reports security holes by automatically scanning and proving systems and services on the network. **Cost: \$13,000.00**

Intrusion Detection: Additional Blade for alerts. **Cost: \$27,000.00**

**E-Center Presentation Systems:** Two (2) of each of the items below will be installed to complete an integrated presentation center in the Tutoring Center and in the Faculty Center. A turnkey approach is requested to handle all aspects of the presentation project.

Presenter's station: The e-learning centers require a central location for the instructor or trainer to have access to all multimedia presentation equipment. The station will provide a unit to house the computer, mixers, audio and video recorders, DVD recorder, Document Camera and others items as well as an AMX control system. A presentation system will be installed in the student tutoring center, and one in the faculty training center. The cost per unit: **\$3000.00.**

Projector- One projector will be installed in each training center. Each projector will contain Y/C and RGBS or RGBHV inputs and ceiling mount. The projectors will allow the trainer/tutor to give the entire training center demonstrations of software and multimedia use. **Cost per unit: \$8000.00.**

Projection Screen-One 8 ft. projection screen will be used for the multimedia projected images, or training modes of software. **Cost per unit: \$350.00**

Audio Mixer- Automatic microphone mixers are needed for speech reinforcement systems using several microphones. **Cost per unit: \$1000.00.**

Audio Amplifier: 100W, 70/100V Audio Amp converts a line input signal into a greater output to a set of loudspeakers enhancing audio quality. **Cost per unit: \$600.00**

Wireless Hand Held Microphone-Provides presentation capabilities for trainer, faculty or students. **Cost per unit: \$1000.00**

Wireless Lavalier Microphone-Provides hands-free presentation abilities for trainer. **Cost per unit \$1000.00**

Ceiling Speakers-Each training room will require six (6) speakers for sufficient audio in presentations. **Cost per unit: \$150.00 or \$900.00 per room.**

Audio/Video Switcher (RS 232) Provides digital audio or video inputs for all the digital A/V components in presentation system. Will accept optical, coaxial or S-Video signals and automatically cross-convert them to provide multiple outputs to the A/V system. They automatically select whichever video signal is active and the audio signal is switched along with video, keeping source material perfectly synchronized. **Cost per unit: \$800.00**

Y/C to Composite Transcoder The Decoder/Switcher is designed to convert Composite Video into S-Video (Y/C) and switch between the converted Composite Video input and an additional S-Video input to one S-Video output. It is an excellent compatibility solution for many applications, especially for presentation applications where two different formats are to be switched to destination requiring a Composite Video input. **Cost per unit: \$200.00**

AMX Control System- AMX allows users to have total control of several audio visual devices from one simple touch screen. **Cost per unit: \$9, 500.00.**

Audio Cassette Recorder (RS-232 or IR)-This will provide standard audio recording for presentations or CDs. **Cost per unit: \$350.00**

S-VHS VCR-To provide capability to play standard video for editing purposes. **Cost per unit: \$300.00**

Switchable Computer Interface- This equipment will be used to interface computer and video display. **Cost per unit: \$300.00**

DVD Player-For DVD authoring and distribution capabilities for edited video. **Cost per unit: \$300.00**

13" Color Monitor **Cost per unit: \$150.00**

Computer w/ monitor-To connect with projector to allow presentation of multimedia, software, and various technological applications. **Cost per unit: \$2000.00**

Surfboard and Surfmouse: For wireless keyboard and mouse capabilities for more opportune presentation purposes. **Cost per unit: \$450.00**

Electronic White Board-To specifically train faculty in the uses of white boards in a traditional or compressed video classroom. **Cost per unit: \$3000.00**

Document Camera- This camera is used for projection of three dimensional objects as well as books, standard hard copies, and handwritten notes as part of a projected image. **Cost per unit: \$3500.00**

Other- Miscellaneous cables, connectors, etc., are needed for (2) rooms. **Cost per room: \$500.00**

<b>Equipment</b>			
<b>Multimedia</b>	<b>Quantity</b>	<b>Cost</b>	<b>Total</b>
Digital Still Cameras	4	\$824.00	\$3,296.00
Digital Video Cameras	4	\$3,986.00	\$15,944.00
Tripods	4	\$145.00	\$580.00
Lighting Kit	2	\$453.00	\$906.00
DV Decks	2	\$3,300.00	\$6,600.00
Misc. Equipment (bags, microphones, etc.)	1	\$4,500.00	\$4,500.00
Scanners		\$2,200.00	\$2,200.00
Printers		\$11,299.00	\$11,299.00
CD/DVD Burner	1	\$1,195.00	\$1,195.00
<b>Multimedia Total</b>			\$46,520.00
<b>Computers</b>	<b>Quantity</b>	<b>Cost</b>	<b>Total</b>
Servers	3	\$18,067.00	\$54,201.00
Desktop Tutoring	30	\$1,393.00	\$41,790.00
Faculty PC	4	\$5,370.00	\$21,480.00
Faculty Macs	3	\$6,007.00	\$18,021.00
High End PC	1	\$7,079.00	\$7,079.00
Faculty PC Notebook	1	\$3,872.00	\$3,872.00
Faculty Mac Notebook	1	\$3,877.00	\$3,877.00
72" Computer Workstations	20	\$400.00	\$8,000.00
<b>Computer Total</b>			\$158,320.00
<b>Portal Servers and Storage</b>			
Sun Fire V480 Server with Power Cord Kit	1	\$22,995.00	\$22,995.00
PGX32 8&24 Color Frame buffer, software, cable	1	\$95.00	\$95.00
Sun StorEdge 2GB network adapter	1	\$4,900.00	\$4,900.00
<b>Server Total</b>			\$27,990.00
<b>Network Hardware</b>			
Firewall Blade	1	\$27,000.00	\$27,000.00
Network Monitor	1	\$13,000.00	\$13,000.00
Intrusion Detection	1	\$27,000.00	\$27,000.00
<b>Network Total</b>			\$67,000.00

Presenter's Station	2	\$3,000	\$6,000.00
Projector w Y/C and RGBS or RGBHV inputs and mnt.	2	\$8,000	\$16,000.00
8' Projection Screen	2	\$350	\$700.00
Audio Mixer	2	\$1,000	\$2,000.00
100W, 70/100 V Audio Amp	2	\$600	\$1,200.00
Wireless HH Mic	2	\$1,000	\$2,000.00
Wireless Lavalier Mic	2	\$1,000	\$2,000.00
Ceiling Speakers	12	\$150	\$1,800.00
8x2 Y/C Audio/Video Switcher (RS-232)	2	\$800	\$1,600.00
Y/C to Composite Transcoder	2	\$200	\$400.00
AMX Control System	2	\$9,500	\$19,000.00
Audio Cassette Recorder (RS-232 or IR)	2	\$350	\$700.00
S-VHS VCR	4	\$300	\$1,200.00
Switchable Computer Interface	2	\$300	\$600.00
DVD Player	2	\$300	\$600.00
13" Color Monitor	2	\$150	\$300.00
Computer w/ monitor	2	\$2,000	\$4,000.00
Surfboard and Surfmouse	2	\$450	\$900.00
Electronic White Board	2	\$3,000	\$6,000.00
Document Camera	2	\$3,500	\$7,000.00
Miscellaneous (cables, connectors, etc.)	2	\$500	\$1,000.00
<b>Total Presentation</b>			\$75,000.00
<b>TOTAL EQUIPMENT</b>			\$374,830.00

## 2. SOFTWARE

**E-Center software for faculty:** The following software will be installed on the computers for the Faculty Teaching and Learning E-Center. The software will be used for various multimedia applications, digital video editing, production and presentation.

Avid Digital Video Editing Software: This software will be used on a central editing station to train teachers and allow the creativity and the image quality needed to deliver professional-grade video on a desktop, laptop, or in a web course. Avid is the industry's leading editing environment. **1 unit: \$1295.00 per unit.**

Adobe-video production tools: **10 units of After Effects (\$699.00); InDesign (\$250.00); Premier (\$549.00); and GoLive (\$699.00);** will provide the tools necessary for professional quality results for applications from nonlinear video editing and stunning special effects to advanced audio editing and DVD authoring.

Adobe publishing collection- The collection includes Acrobat, Photoshop, Illustrator, and PageMaker with groundbreaking options and tools for creating compelling artwork for Web sites, digital videos, print materials, and more. **10 units: \$1000.00 per unit.**

QuickTime Pro- will provide media authoring and play back of high-quality audio and video QuickTime Pro enables creation of slide shows from digital images with a few simple clicks and allows the addition of individual soundtracks. Keynote presentations can be exported to QuickTime and played in full-screen mode on Macs and Windows PCs for impressive presentations. **10 units: \$30.00 per unit.**

The VR Worx- The complete suite of QuickTime VR authoring tools from VR Toolbox. The VR Worx combines the QTVR tools into a single integrated interface, creating the ideal software solution for the user who needs all that QuickTime has to offer. The VR Worx gives the ability to generate QTVR Panorama movies, Object movies, and Multinode scenes, incorporating the most advanced elements of QuickTime VR. **10 units: \$300.00 per unit.**

Microsoft Visio 2003- The user may use these simple, flexible tools to easily create technical charts and graphics to communicate ideas, data, and material with impact. **10 units: \$60.00 per unit.**

Microsoft Publisher: This is a desktop publishing tool that allows users to design creative documents, brochures, business cards, flyers, etc. with a professional look. **10 units: \$60.00 per unit.**

Microsoft Office: A complete set of word processing, spread sheets, databases and slideshow tools to assist instructors in classroom management. **10 units: \$60.00 per unit.**

Macromedia Director MX- Allows users to build rich content that delivers real results, integrating interactive audio, video, bitmaps, vectors, text, fonts, and more. Director allows the creation of accessible content for people with disabilities. Content can then be deployed on CD, DVD, or to web users. **10 units: \$1,200.00 per unit.**

Macromedia Studio MX- Macromedia Studio MX is an integrated suite of easy-to-use, powerful, and development tools that includes Macromedia Flash MX, Macromedia Dreamweaver MX, Macromedia Fireworks MX, and Macromedia FreeHand MX, and Macromedia ColdFusion MX Developer Edition (Windows only). Macromedia Studio MX streamlines each stage of the web production process—from creating graphics to laying out HTML pages, coding application logic, building rich-user interfaces, and assembling complete solutions. **10 units: \$900.00 per unit.**

Macromedia Authorware- Develop accessible rich-media e-learning applications and use the Macromedia user interface to import Microsoft PowerPoint presentations and create highly interactive rich content. The user may implement computer-based training, develop interactive lessons, or create instructional CDs—and more. **10 units: \$1,200.00 per unit.**

Helix Server-The universal media server is a true performance breakthrough, which can deliver over 10,000 concurrent audio streams on standard hardware. **1 unit: \$2000.00 per unit.**

Accordent's PresenterOne: Authoring software that enables the user to utilize the powerful and innovative RealOne platform to create compelling Web-based presentations. Users can add and synchronize audio and video to PowerPoint slides, then deliver them to an audience of one or many over the Internet. **1 unit: \$1995.00 per unit**

Osprey-500 DV-A professional-level digital capture card which provides end-to-end digital encoding and advanced pre-processing features for both analog and digital sources. With these attributes, the Osprey-500 provides professional results for streaming audio and video. **1 unit: \$895.00 per unit.**

Cleaner 5: RealSystem Edition This will optimize the users' media quality and streamline the encoding workflow. Cleaner is used by students, instructors, web designers and video pros new to streaming, as well as anyone who wants the highest final output quality of their media content. **1 unit: \$425.00 per unit.**

Camtasia Studio- Software that captures the screen activity and sounds of any Windows desktop for a defined time and produces videos to be streamed or emailed to others. It is actually a suite of four separate programs, each designed to aid in the creation and production of the desktop video and audio. **1 unit: \$395.00 per unit.**

#### **SCT Campus Pipeline Solutions:**

SCT Luminis Foundation Package: A combination of components and offerings from the Luminis product family which comprise a recommended “baseline” platform, content management, integration, and customization technologies,

delivering a robust, flexible foundation (portal) for a digital campus (or equivalent). Cost for portion of software needed: **\$112, 500.00**.

SCT Implementation and support: This purchase (or equivalent) will cover implementation support and training costs. Implementation support includes preparation, engagement management, and follow-up training and consulting on-campus and/or from the SCT offices. Funding needed to pay for portion of professional implementation totals **\$95,650.00**

**E-Center software for students:**

Math Skills Software-Software application will provide skills building and tutoring for the students in various mathematics applications. Cost **\$25,000.00**

Reading Skills Software-Software application will provide skills building and tutoring for the students in various reading applications. Cost **\$25,000.00**

<b>Software</b>				
<b>Faculty E- Center</b>	<b>ITEM</b>	<b>Unit</b>	<b>Qty</b>	<b>Total</b>
Adobe	AfterEffects	\$699.00	10	\$6,990.00
	InDesign	\$250.00	10	\$2,500.00
	Premier	\$549.00	10	\$5,490.00
	GoLive	\$699.00	10	\$6,990.00
Adobe Publishing Collection		\$1,000.00	10	\$10,000.00
	Acrobat			
	Photoshop			
	Illustrator			
	PageMaker			
Quicktime	VR Worx	\$300.00	10	\$3,000.00
	Pro	\$30.00	10	\$300.00
Microsoft	Office	\$60.00	10	\$600.00
	Publisher	\$60.00	10	\$600.00
	Visio	\$60.00	10	\$600.00
Macromedia	Studio MX	\$900.00	10	\$9,000.00
	Director	\$1,200.00	10	\$12,000.00
	Authorware	\$1,200.00	10	\$12,000.00
				\$0.00
Avid	X-Press DV 3.5	\$1,295.00	1	\$1,295.00
Apple	Final Cut Pro	\$1,000.00	4	\$4,000.00
Real				
	Presenter	\$1,995.00	1	\$1,995.00
	Cleaner	\$425.00	1	\$425.00
	Helix Server	\$2,000.00	1	\$2,000.00
	Osprey Video Card	\$895.00	1	\$895.00
	Camtasia	\$395.00	1	\$395.00
<b>Total (Faculty Software)</b>			1	\$81,075.00

<b>Student Tutoring E-Center</b>				
Math Tutoring Software	TBA	\$25,000.00		\$25,000.00
Reading Tutoring Software	TBA	\$25,000.00		\$25,000.00
<b>Total Student Software</b>				\$50,000.00
<b>SCT Campus Pipeline (Portal)</b>				
SCT	Luminus Foundation	\$112,000.00	1	\$112,000.00
	Implementation	\$95,650.00	1	\$95,650.00
<b>Total Portal</b>				\$207,650.00
<b>Grand Total Software</b>				\$338,725.00

### 3. TELECOMMUNICATIONS

None

### 4. PROFESSIONAL SERVICES

Presentation system Installation: This includes the professional installation of two (2) complete presentation systems, ensuring compatibility of various components. **2 room installation: \$2500.00 per room**

Re-engineering training-These professional consultants will conduct training for the network specialists in the operation and maintenance of the restructured network. **1 unit: \$10,000.00 per unit.**

Graduate student tutors- Tutors will assist students in the use of the tutoring software, and additional face-to-face instruction. **2 years: \$40,000.00 per year**

Reading Specialist-To set up schedules, obtain data for reading scores, administer tests, and train student tutors. **2 years: \$35,000.00 per year**

Database Administrator-Professional services consultant will be responsible for installation, maintenance and administration of software systems databases used by McNeese faculty, staff, and students within the portal system. **2 years: \$40,000.00 per year**

Professional Services			
	QTY	COST	TOTAL
Presentation System Installations	2	\$2,500.00	\$5,000.00
Network Re-engineering Training	1	\$10,000.00	\$10,000.00
Graduate Student Tutors	2	\$40,000.00	\$80,000.00
Reading Specialist	2	\$35,000.00	\$70,000.00
Database Administrator	2	\$40,000.00	\$80,000.00
<b>Total Professional Services</b>			\$245,000.00

## 5. OTHER COSTS

Networking supplies for e-Center-Each of the labs in the Teaching and Learning e-Center will need networking (Internet) capability. **Cost: \$5000.00**

Miscellaneous- surge protection, cabling, installation, wiring, blank discs, blank tapes, etc. **Cost: \$3,000.00.**

OTHER	
ITEM	COST
Networking for e-center	\$5,000.00
Miscellaneous for e-center (surge protection, cabling, installation, wiring, blank discs, blank tapes, etc	\$3,000.00
Total Other	\$8,000.00

## V. FUNDING REQUESTED

### Louisiana Technology Innovation Fund:

**Equipment:** McNeese is requesting **\$374,830.00** in LTIF funds for equipment for the portal and the e-center.

**Software:** McNeese is requesting **\$338,725.00** in LTIF funds for software for the portal and for the Teaching and Learning e-Center.

**Professional Services:** McNeese is requesting a total **\$245,000.00** in LTIF funds that includes the professional services for the Database Administrator, the Reading Specialist, and graduate assistants for a period of two years, and the professional installation of the two presentation systems and network re-engineering training at a one-time cost.

**Other:** McNeese is requesting **\$8,000.00** in LTIF funds to support part of the networking costs for the Teaching and Learning e-Center.

### Institutional Match:

#### Equipment

Cash funds: The university has already begun implementation of the Banner system which will guide the business system for the university and that is also an essential component of the portal. The institution will fund an additional **\$100,000.00** in hardware for Banner during the next year.

In-kind funds: McNeese has also dedicated funds to prepare the network for the portal. They have invested **\$24,000** for a new router, and **\$10,000** for Packeteer, additional security hardware. They have also spent **\$50,000** for the switches that are essential for the portal operation and replace the existing hubs.

**Total Equipment Match: \$184,000.00**

#### **Software**

Cash funds: McNeese will fund the **\$207,650.00** of the total \$415,300.00 for the cost of the SCT Luminis Software (portal) or equivalent and its implementation. The funding will be available from the university's Technology for the Advancement of Students Committee (TASC). The institution has also dedicated **\$300,000.00** for additional Banner software over the next year.

**Total Software Match: \$507,650.00**

#### **Professional Services**

In-kind funds: The McNeese operating budget has dedicated a portion of the duties of the two personnel, 50 percent for the Tutoring Coordinator and 30 percent for the Instructional Technologist, to services for the Teaching and Learning E-Center: **2 Years: \$25,235.00** per year

**Total Professional Services Match: \$ 50,470.00**

#### **Other**

Cash funds: The Information Technology budget will supply the extra funding of approximately **\$6000.00** for the additional networking costs for the E-Center.

<b>Funding Category</b>	<b>Total Project Cost</b>	<b>University In-kind/cash Sources</b>	<b>LTIF Funding Requested</b>
Equipment	\$558,830.00	\$184,000.00	\$374,830.00
Software	\$846,375.00	\$507,650.00	\$338,725.00
Telecommunications	\$0.00	\$0.00	\$0.00
Professional Services	\$295,470.00	\$50,470.00	\$245,000.00
Other	\$14,000.00	\$6,000.00	\$8,000.00
<b>TOTAL</b>	<b>\$1,714,675.00</b>	<b>\$748,120.00</b>	<b>\$966,555.00</b>

## VI. Cost Benefit Analysis

### EXPENDITURES

<u>STATE COSTS</u>	<u>2003-2004</u>	<u>2004-2005</u>	<u>TOTAL</u>
Operating Services	\$338,725		\$338,725
Professional Services	\$130,000	\$115,000	\$245,000
Other Changes	\$8,000		\$8,000
Equipment	\$374,830		\$374,830
Total State Expenditures	\$851,555	\$115,000	\$966,555

<u>MCNEESE COSTS</u>	<u>2003-2004</u>	<u>2004-2005</u>	<u>TOTAL</u>
Operating Services	\$207,650	\$300,000	\$507,650
Personnel	\$25,235	\$25,235	\$50,470
Other Changes	\$6,000		\$6,000
Equipment	\$84,000	\$100,000	\$184,000
Total MSU Expenditures	\$322,885	\$425,235	\$748,120

#### **Personnel (By Classification)**

	<u>Position</u>	<u>Salary</u>
Alison Blevins	Academic Services/Tutoring Coordinator	\$31,930
Steven Ting	IT Trainer/Computer Technician	\$30,900

#### **Means of Financing for Above Expenditures Agency Self-Restricted**

#### **Narrative Explanation of Expenditure Impact**

##### **1. Implementation costs.**

The costs of implementing this project as listed above totals **\$966,555.00**. These costs include professional services, hardware, and software costs to construct a teaching and learning e-center. Additional costs incurred by McNeese are the hardware and software for the portal which will complement the Banner system already being implemented, and place the university in line for wireless technology.

**2. Source of Funds.**

McNeese State University has already committed the above funds to begin a program of enhancing the usage of technology among its faculty and students. These resources, primarily the two staff positions listed have been slated to help to develop student and faculty success. These funds are already a part of the overall university budget and will continue to be so. This grant will provide additional funding to help supplement this fledgling program.

**VII. Signed Standard Form**

\_\_\_\_\_  
Robert D. Hebert, President  
McNeese State University

\_\_\_\_\_  
Date

\_\_\_\_\_  
Jeanne M. Daboval  
Academic Vice President  
Acting for V.P. of Business Affairs

\_\_\_\_\_  
Date

\_\_\_\_\_  
Helen B. Ware  
Project Manager

\_\_\_\_\_  
Date